WAPA/WSDOT JOINT TASK FORCE
Meeting minutes
May 15, 2003

The meeting was held in Spokane and was hosted by Ralph Robertson of the WSDOT Eastern Region. Don Nelson, WSDOT Director of Environmental and Engineering Programs, chaired the meeting.

Introduction
See the List of Attendees following these minutes.

Restructuring the WAPA/WSDOT Joint Task Force
The WAPA/WSDOT joint task force has been in place since the late 80's, during the time period that statistical evaluation of hot mix asphalt was being implemented. At that time, there was also an active technical committee within the paving association that regularly met to discuss and give focus to technical issues from the industry perspective. Since the formation of the Joint Task Force, the technical committee of the association has become inactive and the Task Force has replaced the regular meetings of the technical committee. A number of new initiatives have been brought to the Joint Task Force by the WSDOT in recent years. Also, issues from individual industry members have been brought to the Task Force for discussion. The Task Force has tried to handle all issues that have come before it. Some of these issues were of a policy nature and some were intensely technical. The Task Force has seemed to have lost some of its focus and direction as a result.

At a summit meeting of WSDOT and WAPA leadership, ideas were discussed on how to restructure the Joint Task Force to make it more productive and mutually beneficial to both the WSDOT and WAPA. It was decided that the joint task force should function as a steering committee that would focus more on policy and less on the technical issues. Technical issues would be assigned to task groups that would have joint leadership by WAPA and WSDOT. The mission of each task group would be to evaluate the assigned topic and develop a strategy that would be reported back to the task force for acceptance. To the extent possible, timelines would be set for closure of issues. The task groups will be accountable to the Joint Task Force, and status and outcomes from the groups will be reported at each Joint Task Force meeting.

Currently, there are seven task groups working issues. The status of work done by each of these task groups is detailed in the next section of these minutes. In addition to the task groups, WAPA will re-form a technical committee. This committee will, among other duties, review issues brought forward by WAPA members prior to presentation to the joint task force.

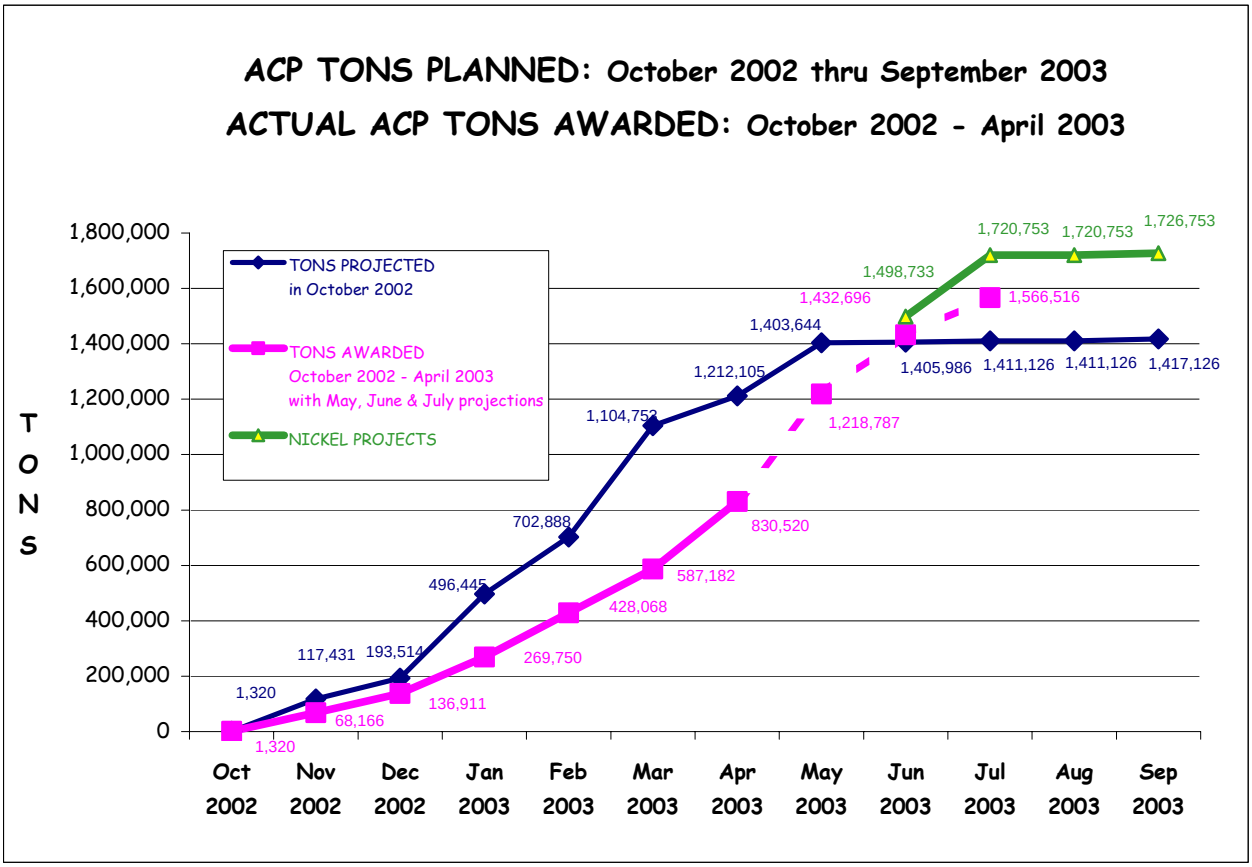
Report on Task Groups
The activities of each task group were presented. A summary of the activities for the task groups that have had meetings were handed out and are included with these minutes. The Smoothness and the Longitudinal task groups have not met at this time. The task groups and the chair are as follows:

Section 5-04 Rewrite – Dave Erickson

Eliminating Negative Density Differentials – Tom Baker

Superpave Volumetric Implementation – Jim Spaid
Smoothness – Jim Spaid
Tack Coat – Linda Pierce
Sand Equivalent – Tom Baker
Longitudinal Joint – Linda Pierce

Paving Quantity Projections Update
Kevin Dayton handed out a graph of the tons of HMA awarded with projections into July. The chart has been updated following the meeting and is shown below.



The graph also included the tons of 5 new projects that are a product of the nickel tax. These projects are as follows:

Salmon Creek to I-205	May 2003 ad	92,747 tons	SW Region
SR 500 NE 112th Ave – Interchange	June 2003 ad	48,510 tons	SW Region
I-90 / Ryegrass Summit to Vantage – Paving	June 2003 ad	89,150 tons	SC Region
I-90 / Highline Canal to Elk Heights	June 2003 ad	10,920 tons	SC Region
I-90 Argonne to Sullivan Road	May 2003 ad	68,300 tons	Eastern Region

Lump Sum Traffic Control

David Spivey brought up the topic of lump sum traffic control. This method of payment was implemented without input from WAPA and is a concern for them. There are 16 pilot projects using a new specification developed by the AGC Administration Team (there are additional projects that also have lump sum traffic control using an older specification). Ron Howard, State Construction Engineer – Administration, is monitoring these projects and has received input from contractors on projects that have been awarded. David said that WAPA would also provide input after the projects have been completed.

It was also stated that when lump sum traffic control is combined with mandatory DBE goals that it can be difficult to meet the goals as there are not many opportunities on a paving project to utilize DBE contractors.

Update on Mid-Year Meeting

David Spivey announced the presentations for the upcoming mid year meeting at the Skamania Lodge. The agenda for the meeting is included with these minutes. He also stated that WAPA is in the process of developing a website and it is anticipated that the launching of the website will coincide with the mid-year meeting.

2003 Asphalt Conference

The 2003 asphalt conference is in the planning stage. This is a conference that targets local agencies and consultants and is provided by WAPA to help keep them up to date on state of the art practice.

Next Meeting Date

The next meeting will be the mid year meeting to be held on June 5th & 6th at the Skamania Lodge. The annual meeting will be on November 21st at the Sheraton in Seattle.

LIST OF ATTENDEES

Name	Company	Phone
Kirk Berg	WSDOT – NC Region	(509) 667-3030
Lee Bernardi	Inland Asphalt Co.	(509) 536-2631
Kevin Dayton	WSDOT – HQ Construction	(360) 705-7821
Bill Dempsey	Lakeside Industries	(425) 313-2686
Joe DeVol	WSDOT – HQ Materials Lab	(360) 709-5421
Dave Erickson	WSDOT – HQ Construction	(360) 705-7829
Doug Ficco	WSDOT Southwest Region	(360) 905-2023
Tom Gaetz	WAPA	(206) 284-8780
David Gent	ICON / WAPA	(206)-575-3200
Bob Glenn	Lakeside Industries	(360) 533-0610
Bill Hammett	Superior Paving Co.	(509) 248-6823
Graham Hardwick	Rinker Materials	(425) 348-6325
Mel Hitzke	WSDOT – Olympic Region	(360) 704-3213
Garry Kneedler	Degerstrom Corporation	(509) 928-3333
Bill Murphy	Shamrock Paving	(509) 244-2800
Don Nelson	WSDOT HQ	(360) 705-7821
Phil Nickson	WSDOT – SC Region	(509) 577-1804
Linda Pierce	WSDOT – HQ Materials Lab.	(360) 709-5470
Ralph Robertson	WSDOT – Eastern Region	(509) 324-6021
Rocky Ryen	Rinker Materials	(425) 388-1802
Kurt Siegfried	Rinker Materials	(425) 513-6654
Tim Smith	WSDOT – NW Region	(206) 440-4676
Jim Spaid	WSDOT – HQ Construction	(360) 705-7824
David Spivey	WAPA	(425) 388-1844
Steve VanDeBogert	Koch Materials	(509) 487-4560
Jerry Walter	WSDOT – Olympic Region	(360) 357-2607
Jim Walter	WSDOT – HQ Materials Lab.	(360) 709-5410

SECTION 5-04 TASK GROUP

SUMMARY FOR MAY 15, 2003 WAPA/WSDOT JOINT TASK FORCE

By Dave Erickson

- OBJECTIVE
  - The objective of the 5-04 task group is to review and update the Standard Specifications for ACP (section 5-04) for the 2004 Standard Specifications book. This spills over into Division 9 Materials of the Standard Specifications.
- MEMBERS
  - The members are comprised of a mix of WAPA and WSDOT.
    - The following have attended one or both of the task group meetings: Lee Bernadi, Mike Dellinger, Bill Dempsey, Joe DeVol, Dave Erickson, Doug Ficco, Marco Foster, Tom Gaetz, David Gent, Bill Hammett, Mel Hitzke, Cathy Nicholas, Gordon Olson, Linda Pierce, Jerry Roseburg, Lynn Rust, Rocky Ryen, John Schoenfelder, Jim Spaid, David Spivey, Jeff Uhlmeyer, and Jim Walter.
- Dateline
  - May 29, 2002 – email sent to WSDOT (Region Construction Engineers) & WAPA (David Spivey) from Dave Erickson requesting suggested changes to 5-04
  - February 27, 2003 – WAPA/WSDOT Joint Task Force meeting that where formation of task group was initiated
  - February 28, 2003 – email sent with initial draft of changes to 5-04 from Dave Erickson
  - March 28, 2003 – first meeting of task group
  - April 11, 2003 – second meeting of task group
  - May 15, 2003 – third and possibly final meeting scheduled for task group
  - June 30, 2003 – all changes to be finalized for 2004 book
- Summary of Accomplishments
  - Removed many of the prescriptive requirements
    - Asphalt plants
    - Equipment, etc.
  - Replaced the dense graded ACP classes with Superpave
    - This inserts the GSP's (with some revisions) for Superpave into the Standard Specifications including:
      - Mix designs
      - Gradation and tolerances
      - Test Sections
      - Superpave bid items
      - Non volumetric acceptance to be the standard
  - Adds a Commercial acceptance of HMA to supplement Statistical and Nonstatistical acceptance.
  - Renaming of Asphalt Concrete Pavement to Hot Mix Asphalt
  - Plus other text revisions to clarify the specifications and improve upon the final product.
- Remaining Work
  - At the May 15th meeting the goal will be to have completed a review of all of the proposed changes to 5-04 and only have to complete the final text.

ENDD Taskforce – Short Report

April 7, 2003

Attending

Name	Representing	Phone Number	E-Mail Address
Tom Baker	WSDOT	(360) 709-5401	bakert@wsdot.wa.gov
Rocky Ryan	Rinker Material	(425) 348-6329	Rryen@rinker.com
Ralph Robertson	WSDOT	(509) 324-6021	Robertr@wsdot.wa.gov
Kurt Siegfried	Rinker Material		ksiegfreid@rinker.com
Jim Walter	WSDOT	(360) 709-5410	Walterji@wsdot.wa.gov
Lee Benardi	IAC	(509) 536-2631	Lee.Bernardi@oldcastlematerials.com
Bill Whitfield	Icon Materials	(253) 839-2101	Bill.Whitfield@oldcastlematerials.com
David Gent	Icon Materials		Dave.gent@oldcastlematerials.com
Dave Bell	Lakeside Industries		daveb@lakesideind.com
Mel Hitzke	WSDOT		hitzkem@wsdot.wa.gov
Pat McCormick	WSDOT		mccormp@wsdot.wa.gov
Lynn Rust	WSDOT – SW Region		rustl@wsdot.wa.gov
Dave Erickson	WSDOT	(360) 705-7829	Ericksd@wsdot.wa.gov
David Spivey	WAPA		davidspivey@email.msn.com
Kim Willoughby	WSDOT	(360) 709-5474	Willouk@wsdot.wa.gov
Tom Gaetz	WAPA		tombaetz@hotmail.com
Linda Pierce	WSDOT	(360) 709-5470	Piercel@wsdot.wa.gov

1. Review current WSDOT specifications
    a. Systematic Density Testing: minimum density is 89% for 2003 paving season
    b. Density Profiling: Texas and Kansas programs
2. Review Industry proposals to eliminate density differentials caused by thermal differentials on all paving projects:
    a. Dave Gent covered proposal to use a paving contractor QC process to control thermal differentials
    b. Highlights of process include:
        i. Hand-held thermal cameras (as a contract pay item for purchase)
        ii. Density measuring device, possibly non-nuclear (e.g., Pavetracker)
        iii. Contractor employee to operate thermal camera, under bid item
        iv. Contractor monitors thermal differentials and corrects differentials/density differentials
        v. Paving is shut down if temperature/density differentials not corrected
        vi. After re-start, contractor pays cost of QC until uniform results achieved
        vii. Additional shut downs for non-uniformity possible
3. New thermal camera information from FLIR
4. Kim Willoughby presented the new info. Total camera cost is about $25,000 with all accessories. Many favorable comments on cameras.
5. Path forward: To move ahead on this proposal, Taskforce will field review an Eastside and a Westside project in the field with the new FLIR hand-held cameras. Small team to lead this effort, including drafting spec: Dave Gent, Dave Bell, Mel Hitzke, Kim Willoughby, Jim Walter
6. Taskforce will meet again after field review
7. Adjourn

WAPA/WSDOT JOINT TASK FORCE
Superpave Implementation Subcommittee Meeting

Minutes for the April 3, 2003, meeting

The subcommittee is chaired by Jim Spaid and the meeting was held in the NW Region at the Kent Maintenance Facility.

ATTENDEES:

Dave Bell, Lakeside Industries
T. J. Morgan, Inland Asphalt Company
Bill Dempsey, Lakeside Industries
Joe DeVol, WSDOT Materials Laboratory
Kurt Siegfried, Rinker Materials
Phil Nickson, WSDOT South Central Region
Rich Olson, Superior Paving Company
Linda Pierce, WSDOT Materials Laboratory
Tom Baker, WSDOT Materials Lab
Ralph Robertson, WSDOT Eastern Region
Rocky Ryen, Rinker Materials
John Schoenfelder, U.S. Oil & Refining Co.
Dave Erickson, WSDOT Construction Office
Jim Spaid, WSDOT Construction Office
Jim Walter, WSDOT Materials Laboratory
Bill Whitfield, Icon Materials
John Duval, Asphalt Institute

DISCUSSION TOPICS:

1. **Changes in VMA and JMF should be allowed in a similar manner to what is allowed for dense graded mixes.**
   In discussion, it was determined that current volumetric specifications do allow for changes in the JMF that would include the VMA. Contractors indicated that for the most part only gradation and binder content were changed as a result of test section results or to optimize the mix during production.

   In a similar vein, the question was asked about allowing mix designs to be validated if VMA was below the required specified minimum as long as it was within the 1% allowed during production. Jim Walter pointed out that the 1% allowance below the specified minimum VMA was to account for variations in production. If mixes were validated at a lower VMA they would still be held to the same tolerances. Establishing a JMF with a lower VMA may be detrimental to being able to maintain VMA within the specified limits during production. Jim did say that WSDOT could compare mix design data with production data to see if this could be done.

   Action item - WSDOT will evaluate mix design VMA data as compared with production VMA results.

   As a long-range issue, WSDOT will evaluate the current minimum VMA requirements. Are the current minimums giving the best result?

2. **Mix designs for more than one binder source**
   Current specifications indicate that a single source of binder will be used to develop the mix design. There are occasions when a secondary binder source may be needed for various reasons, but to do a full mix design evaluation for a secondary source is both expensive and time consuming.

   On request, the WSDOT will use the contractor's mix design for the secondary binder source and check the requirements for antistripping additive and validate the binder content and Va.

   For volumetric projects, if it becomes necessary to change binder sources during production, a new lot will start with the new binder source. No additional test section will be required.

   For non-volumetric projects, the introduction of secondary binder source will require a new test section to be run.

   Action Item – WSDOT will draft a change to the specification that incorporates the additional testing related to the secondary binder source.

3. **Review of pay factor action levels (weighting factors)**
   A number of topics were discussed that related to this issue. It was noted that bulk specific gravity of the aggregate was based on coarse aggregate only and was not measured in the field during HMA production. There was no suggestion as to how this should be changed. It was noted that VMA may not be a useful tool during production to evaluate what changes must be made to the mix to maintain desired quality levels. VMA has not been a problem for the industry except during the mix design process. Once the mix is set, VMA seems to be relatively easy to maintain.

   Discussion of Va began with the comment that there is variability in the test procedure for Gmb. Joe DeVol noted that he had seen a presentation by John Epps that showed, in pie chart format, what was causing the variability. Jim Walter indicated that results from last year's volumetric projects indicate that Va is a problem. He indicated that the data from those projects needs to be evaluated to see why the Va results were so low (with respect to combined pay factor). It was noted that North Central Region has projects where the testing frequency has been reduced. Dave Erickson has asked about testing two pucks for Gmb and average them to use in the calculation of Va, and to see how testing variability affects the results. Dave has not heard back from NCR on his requires. The Lab also tests two pucks in verifying mix designs. Analysis of that data could provide insight into test procedure variability.

   Action Item – WSDOT will evaluate project data to identify problems related to Va determination.

   Action Item – Follow up on NCR projects that may use two pucks for Gmb determination.

   There was some discussion about bringing in a consultant to re-visit the method used to set weighting factors. This would involve using current data from volumetric projects to analyze the weighting factors for Va and VMA, and the tolerances for those values. A review of what other states are using would also be a part of this analysis. WSDOT will be look into ways to accomplish this.

WSDOT has been monitoring NCAT research on the Corelok vacuum sealing device for determination of Gmb. WSDOT will look into the feasibility of implementing the use of this equipment on a statewide basis.

With regard to recommendations for changes in the weighting of the volumetric pay factors, most of the group thought no changes should be made until further analysis of the data could be done. This also addressed the fact that it would be difficult to incorporate changes into very many 2003 season projects at this late date.

4. **Aggregate properties**

An issue that surfaced from the task group on the re-write of Section 5-04 was the question of whether SE, fracture, flat and elongated particles, and fine aggregate angularity test results should be included in a statistical evaluation. The current specification provides a "go/no-go" option that could mean shutting down the operation if test results were out of specification until the material passes the test. Statistical evaluation might allow the operation to continue with a predetermined method for computing a price adjustment.

The group agreed that no change should be made at this time. There seem to be few problems in achieving the requirements for these aggregate properties.

5. **Va target value**

This issue received some comment at the Joint Task Force meeting. The current special provisions for volumetric projects use a target value for Va of 4.5%. The special provisions for non-volumetric projects, and the earlier superpave projects have a target value of 4.0%. The suggestion was made at the Joint Task Force meeting that the target value return to the original 4.0% value.

This change would amount to a slight increase in the binder content of the mix. Accordingly, this may help in the compaction effort and with the concern about permeable (boney) mixes.

Establishing the target value of 4.5% occurred in conjunction with the statistical evaluation that led to the weighting factors for VMA and Va. The standard deviation of the Va results from previous projects was such that it raised concern that a relatively high percentage of mix could have Va values of less that 3.0% if the target value was 4.0%. Moving the target value to 4.5% minimized that likelihood. WSDOT needs to evaluate the risk of lower Va, and observe actual performance of the air voids. Tom Baker suggested a survey to see what other states are using as a Va target value.

Action Item – Evaluate risk of lower Va (may coincide with Va evaluation)

Action Item – WSDOT will survey other states to see what value is commonly used for a Va target

6. **Va averaging**
   This issue was from discussions at the Joint Task Force meeting. Due to the concern over possible variability in the Va results on many of the volumetric projects last year, it was suggested that the Va be calculated from Gmm and Gmb test results averaged over the trailing five samples. This would average out the variation in the Va from sample to sample and minimize the impact on the combined pay factor.

   It was noted that the Va and VMA, as well as gradation and binder content, are intended to measure the quality of samples of material being produced. Averaging of results diminishes the ability to detect problems and track the quality levels in the production of mix. WSDOT will continue to review the results of previous projects with respect to Va, as noted in item 3 above.

Next Meeting

A summary of this meeting will be presented at the next Joint Task Force meeting scheduled for May 15, 2003. A meeting to review action items needs to be set, so that any specification or procedural changes can be made prior to finalizing paving contracts for the 2004 season (late summer – early fall).

Tack Coat Taskforce – Short Report

April 21, 2003

Name	Representing	Phone Number	E-Mail Address
Linda Pierce	WSDOT	(360) 709-5470	piercel@wsdot.wa.gov
Jim Walter	WSDOT	(360) 709-5410	Walterji@wsdot.wa.gov
Bill Whitfield	Icon Materials	(253) 839-2101	Bill.Whitfield@oldcastlematerials.com
Mel Hitzke	WSDOT	(360) 357-3213	hitzkem@wsdot.wa.gov
Dave Erickson	WSDOT	(360) 705-7829	Ericksd@wsdot.wa.gov
David Spivey	WAPA	(206) 284-8780	davidspivey@email.msn.com
Tom Gaetz	WAPA	(206) 284-8780	tombaetz@hotmail.com
Bob Glenn	Lakeside	(360) 533-0610	bgleenn@techline.com
Jim Weston	WSDOT	(360) 709-5496	westonj@wsdot.wa.gov
Tim Shearer	Woodworth & Co		tim@woodworthandco.com
Stephen VanDeBogert	Koch Materials	(509) 487-4560	vandebos@kochind.com
Rocky Ryen	Rinker Materials	(425) 348-6329	rryen@rinker.com
John Duval	Asphalt Institute	(503) 234-3935	jduval@asphaltinstitute.org

1. Concerns
   a. Laboratory acceptance procedure
   b. Field acceptance procedure - residual
   c. What is the correct application rate? What is uniform coverage?
2. Would application at a higher temperature allow for a faster break? At what temperature does tack break? (Steve VanDeBogert will discuss with KOCH asphalt specialist)
3. Challenge is within the first hour of paving and on the length of the paving (longer lengths allow for more time for tack to break)
4. CSS-1 is used since it is very stable, tolerates lower air temperatures, and allows for variable dilution rates
   d. Use of CRS-1
      i. Most producer's in Washington state do not supply
      ii. Material is unstable for longer storage periods
   e. STE-1
      i. Breaks around 140°F
   f. Problems with other emulsions may include
      i. Storage
      ii. Handling
      iii. Contamination
5. Use of paving grade asphalt
   g. May require twice the shot rate
   h. Higher application rate poses a problem on super's and truck tracking problems
   i. Texas has conducted studies on the exclusive use of paving grade asphalt
6. Woodworth and Co. has volunteered to offer their yard for a tack coat experiment
   j. Potential test sections would include:
      i. Milled sections – cleanliness, tack rate, etc.
      ii. Different application rates – milled and non-milled sections
      iii. Paving over broken and unbroken tack
      iv. Vary dilution rates
      v. Vary tack coat temperature
   k. Evaluation would include (literature search on other testing techniques to be completed)
      i. Coring and visual inspection
      ii. Superpave Shear Tester for bond strength (Louisiana Transportation Research Center)
7. Linda Pierce to determine testing matrix for Woodworth experiment, Texas use of paving grade asphalts, and literature search for tack coat testing procedures for next meeting (to be scheduled)
8. Adjourn

SE Taskforce: Short Report

April 25, 2003 1-3 p.m.

Attending:

Name	Representing
Tom Baker	WSDOT State Materials Lab
Joe Devol	WSDOT State Materials Lab
Jim Walter	WSDOT State Materials Lab
Don Brouillard	WSDOT State Materials Lab
Keith Howard	Wilder Construction
Tom Gaetz	WAPA
Bill Whitfield	ICON Materials
Dave Erickson	WSDOT Construction Office
Gary Albert	Martin Marietta Materials
Dave Gent	ICON Materials

1. History of SE test change and taskforce
   Jim Walter and Don Brouillard handed out a one-page summary of how we got to where we are.
2. Proposal for change – use AASHTO T176 4.3.3 Reference Method, either for production or for referee.
   - Consensus is that the oven drying is the biggest effect compared to the wet process.
   - Consensus is that both the mechanical shaker and the spring apparatus are effective and yield comparable results.
   - Decision was made to change the test method to:
     - Use AASHTO T176, Alternate Method 1 – Air Dry
     - Use dried sample, dried to constant mass at 230 +/- 9 degrees F
     - Use either mechanical shaker or spring apparatus shaker
3. Change Checklist:
   - What does it do? Standardizes test method
   - Why are we introducing it? To resolve failing SE tests at sources that previously passed the old WSDOT test method
   - What is the benefit / cost? Slight additional cost to WSDOT for testing, including buying, over time, more mechanical shakers. Benefits come from less re-testing and less confrontation over SE test results, and from not excluding previously acceptable sources of material.
   - Does it make sense? Absolutely.
4. Consensus for path forward including implementation dates:
   - Jim Walter – check with Region on availability of ovens
   - Jim Walter – check on timeframe for returning results to contractors for statistical acceptance of aggregates
   - Jim Walter – draft memo for Tom and Kevin signature, to Regions, explaining change for new projects and allowing a “no-cost” change order for SE testing on existing projects
5. Adjourned

WAPA
Washington Asphalt Pavement Association

Washington State Department of Transportation

2003 MID YEAR MEETING June 5 & 6
Skamania Lodge

Thursday June 5

Reception	**6:00 to 7:00pm**	*Stevenson A*
Dinner	**7:00 to 9:00pm**	*Stevenson A*

Friday June 6

Breakfast	**7:30 to 8:30am**	*Stevenson A*
General Meeting	**8:30 to Noon**	*Stevenson B*

8:30am **Welcome**
Dave Gent, WAPA. John Conrad, WSDOT

8:35am **It's all in the delivery.**
John Conrad, WSDOT

8:50am **Technical Presentation**
Linda Pierce, WSDOT

9:25am **Virtual Compaction**
Joe Mahoney, UW

10:00am **Break**

10:15am **Wake me up when it's over.**
Bill Conerly, Economist

11:00am **WAPA Website & Directory**
Steve Muench & George White, UW

11:15am **Updated Nickel Package Tonnage Forecast**
Kevin Dayton, WSDOT

11.45pm **Q & A, Introduce Tom Gaetz, Wrap Up**
Dave Gent, WAPA